Patent claims

1.   Method for representation of a subject (3) imaged in a first volume data set (20), comprising the following method steps:

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-       generation of a second volume data set (30) in which the volume elements (23) of the first volume data set (20) are depth-dependently modulated and/or coded parallel to a main observation direction (22) running into the first volume data set (20),

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-       application the volume rendering to the second volume data set.

2.   Method according to claim 1, in which a transfer function is used for activation of the depth-dependent 3D representation.

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3.   Method according to claim 1 or 2, in which the transfer function for the volume rendering has the form of a canted bar (40).

4.   Method according to any of the claims 1 through 3, in which the transfer

20   function is stored in a lookup table.

5.   Method according to any of the claims 1 through 4, in which the volume rendering is controlled with a navigation system.

25   6.   Method according to any of the claims 1 through 5, in which the volume rendering is manually controlled with a computer input apparatus.

7.   Method according to any of the claims 1 through 6, in which what is known as a "texture mapping", in particular according to the shear warp method, is

30   additionally implemented, and possibly with what are known as multi-textures.

8.   Method according to claim 7, in which the "texture mapping" is implemented by means of the hardware of a graphic card 13.

5   9.   Method according to any of the claims 1 through 8, in which volume elements (23) of the first and/or second volume data set (20, 30) are interpolated.

10.   Method according to any of the claims 1 through 9, in which the first and/or second volume data set (20, 30) are filtered.

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11.   Method according to claim 10, in which the result of the filtering of the first volume data set and/or the result of the filtering of the second volume data set (20, 30) are buffered.

15   12.   Method according to any of the claims 5 through 11, in which segmented partial subjects are stored beforehand with a color value that corresponds to a specially-reserved range of the lookup table, such that they can be illuminated with their own coloring relative to their surroundings, relative to other subjects of the described volume rendering, and can thereby be specifically addressed with the
20   navigation system.